

CLAIMS:

1. A soft proofing system comprising:
a viewing station that displays an image subject to one or more viewing conditions for the image; and
a measurement device that calibrates the viewing station,
wherein the viewing conditions include a condition that the measurement device is known to support calibration of the viewing station to less than or equal to a maximum magnitude of error.
2. The system of claim 1, further comprising an administrative computer that specifies the viewing conditions.
3. The system of claim 1, wherein the viewing conditions comprise calibration information indicating a required calibration state of a display device associated with the viewing station, the calibration state of the display device being achieved via the measurement device.
4. The system of claim 1, wherein the viewing conditions comprise calibration information that specifies a maximum amount of time since a display device associated with the viewing station was last calibrated using the measurement device.
5. The system of claim 4, wherein the viewing station automatically instructs a user to calibrate the display device using the measurement device when the display device has not been calibrated within the maximum amount of time.
6. The system of claim 1, wherein the viewing conditions define a calibration procedure to be followed prior to the viewing station displaying the image.

7. The system of claim 1, wherein the viewing conditions comprise warm-up information that cause the viewing station to restrict display of the image when a display device of the viewing station has not been turned on for at least a specified amount of time.
8. The system of claim 1, wherein the viewing conditions include a condition that the measurement device is a certified measurement device.
9. The system of claim 8, wherein the viewing station communicates with the measurement device to verify that the measurement device is a certified measurement device.
10. The system of claim 9, wherein the viewing station obtains a unique identifier from the measurement device, and verifies that the measurement device is a certified measurement device based on the unique identifier.
11. The system of claim 10, wherein the viewing station accesses a list of unique identifiers associated with certified measurement devices, and the viewing station consults the list to verify that the measurement device is a certified measurement device based on the unique identifier obtained from the measurement device and the list of unique identifiers.
12. The system of claim 11, wherein the list of unique identifiers is stored remotely from the viewing station.
13. The system of claim 1, wherein the viewing station restricts display of the image when any of the viewing conditions are not satisfied.
14. The system of claim 1, wherein the measurement device comprises a stand-alone measurement device.

15. The system of claim 1, wherein the measurement device includes a software component running on the viewing station.
16. The system of claim 15, wherein the software component running on the viewing station comprises one of a communication application that communicates with the measurement device and a device driver that drives communication with the measurement device via an operating system associated with viewing station.
17. The system of claim 1, further comprising a software-based measurement correction module to correct a color output response of the measurement device.
18. The system of claim 1, wherein the maximum magnitude of error of the measurement device comprises an accuracy of less than approximately $\pm 1 \Delta E$.
19. The system of claim 1, wherein the maximum magnitude of error of the measurement device is determined relative to a reference measurement device.
20. The system of claim 1, wherein the measurement device includes a colorimeter and the reference measurement device includes a telespectroradiometer.
21. The system of claim 1, wherein the maximum magnitude of error is less than approximately $0.5 \Delta E$.
22. A method comprising:
calibrating a viewing station using a measurement device; and
restricting display of an image on the viewing station when one or more viewing conditions are not satisfied,
wherein the viewing conditions include a condition that the measurement device is a measurement device known to support calibration of the viewing station to less than or equal to a maximum magnitude of error.

23. The method of claim 22, further comprising receiving the viewing conditions from an administrative computer.
24. The method of claim 22, wherein calibrating the viewing station using the measurement device comprises calibrating a display device associated with the viewing station to a particular calibration state, and further wherein the viewing conditions comprise calibration information indicating a required calibration state of the display device.
25. The method of claim 22, wherein the viewing conditions comprise a calibration procedure to be followed prior to displaying the image on the viewing station.
26. The method of claim 22, wherein the viewing conditions comprise calibration information that specify a maximum amount of time since a display device at the viewing station was last calibrated using the measurement device.
27. The method of claim 26, further comprising instructing a user to calibrate the display device when the display device has not been calibrated using the measurement device within the maximum amount of time.
28. The method of claim 22, further comprising displaying the image only when the viewing conditions have been met and a viewing station has been turned on for at least a specified amount of time.
29. The method of claim 22, further comprising communicating with the measurement device to verify that the measurement device is a certified measurement device.
30. The method of claim 29, further comprising obtaining a unique identifier from the measurement device, and verifying that the measurement device is a certified measurement device based on the unique identifier.

31. The method of claim 30, further comprising consulting a database to verify that the measurement device is a certified measurement device based on the unique identifier obtained from the measurement device and a list of unique identifiers stored in the database.

32. The method of claim 22, further comprising executing a software-based measurement correction module to correct a color output response of the measurement device.

33. The method of claim 22, wherein the maximum magnitude of error of the measurement device comprises an accuracy of less than approximately $\pm 1 \Delta E$.

34. The method of claim 22, wherein the maximum magnitude of error of the measurement device is determined relative to a reference measurement device.

35. The method of claim 34, wherein the measurement device includes a colorimeter and the reference measurement device includes a telespectroradiometer.

36. The method of claim 22, wherein the maximum magnitude of error is less than approximately $0.5 \Delta E$.

37. A computer-readable medium comprising instructions to cause a processor to:
restrict display of an image on a viewing station according to the image data when one or more viewing conditions are not satisfied,
wherein the viewing conditions include a condition that the viewing station be calibrated with a measurement device that is a certified measurement device known to support calibration of the viewing station to less than or equal to a maximum magnitude of error.

38. The computer-readable medium of claim 37, wherein the instructions cause a process to receive the viewing conditions from an administrative computer.
39. The computer-readable medium of claim 37, wherein the viewing conditions comprise a calibration procedure to be followed prior to displaying the image on the viewing station.
40. The computer-readable medium of claim 37, wherein the viewing conditions comprise calibration information that specify a maximum amount of time since a display device at the viewing station was last calibrated using the measurement device.
41. The computer-readable medium of claim 37, wherein the instructions cause the processor to instruct a user to calibrate the display device when the display device has not been calibrated using the measurement device within the maximum amount of time.
42. The computer-readable medium of claim 37, wherein the instructions cause the processor to direct display of the image according to the image data only when the viewing conditions have been met and a viewing station has been turned on for at least a specified amount of time.
43. The computer-readable medium of claim 37, wherein the instructions cause the processor to communicate with the measurement device to verify that the measurement device is a certified measurement device.
44. The computer-readable medium of claim 43, wherein the instructions cause the processor to obtain a unique identifier from the measurement device, and verify that the measurement device is a certified measurement device based on the unique identifier.
45. The computer-readable medium of claim 44, wherein the instructions cause the processor to consult a database to verify that the measurement device is a certified

measurement device based on the unique identifier obtained from the measurement device and a list of unique identifiers stored in the database.

46. The computer-readable medium of claim 37, wherein the instructions cause the processor to execute a software-based measurement correction module to correct a color output response of the measurement device.

47. A viewing station for soft proofing applications, the viewing station comprising:
a display device that displays images;
a measurement device that calibrates the display device; and
a measurement correction module that corrects calibration information from the measurement device to correct gray balance error, white point errors and linearity errors.

48. The viewing station of claim 47, wherein the measurement correction module corrects systematic errors in the calibration information such that a maximum magnitude of error in the calibration information is less than approximately 0.5 delta E.

49. The viewing station of claim 47, wherein the viewing station includes a personal computer, and the measurement device includes a colorimeter coupled to the personal computer.

50. The viewing station of claim 47, wherein the viewing station includes a personal computer, and the measurement device includes a colorimeter coupled to the personal computer.